Zoological Record

Vol. 90, Sect. 2, 1953

PROTOZOA

COMPILED BY

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and R. H. CUMMINGS, Ph.D., B.Sc.

LONDON
PUBLISHED BY
THE ZOOLOGICAL SOCIETY OF LONDON

PRICE SEVEN SHILLINGS AND SIXPENCE

November, 1955

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†*Alabamina* ? *amchitkaensis* **sp. n.** (p. 5) Lower Tertiary, Aleutian Islands, TODD Contr. Cushman Fdn. **4** (1) 1953 : 1–7 figs.

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†*Ammobaculoides coonanaensis, pitmani* **spp. n.** (p. 30), *A. romaensis* **sp. n.** (p. 31) Lower Cretaceous, Australia CRESPIN Contr. Cushman Fdn. **4** (1) 1953 : 26–36 figs.

†*Ammomarginulina brevilingulata* **sp. n.** (p. 50) Miocene, Louisiana, SMITH Geol. Bull. New Orleans **26** 1948 : 1–80 figs.

†*Ammotium* **gen. n.** (p. 33) (genotype *Lituola cassis* Parker 1870) Lower Cretaceous-Recent, LOEBLICH & TAPPAN Smithson. misc. Coll. **121** (7) 1953 : 1–150 figs.

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†*Anomalina mawsoni* **sp. n.** (p. 36) Lower Cretaceous, Australia, CRESPIN Contr. Cushman Fdn. **4** (1) 1953 : 26–36 figs. ; †*A. pseudoammonoides* **sp. n.** (p. 104) Paleocene, New Jersey, MCLEAN Contr. Cushman Fdn. **4** (3) 1953 : 103–105 figs.

†*Archaias kirkukensis* **sp. n.** (p. 43) ; *A. operculiniformis* **sp. n.** (p. 44), Oligocene, Iraq, HENSON (" Special Publication "] 1950.

†*Assilina daviesi* **var. n.** *nammalensis* (p. 82) ; *A. laminosa, sublaminosa* **spp. n.** (p. 83) Lower Eocene, Pakistan, GILL Contr. Cushman Fdn. **4** (2) 1953 : 76–84 figs. ; †*A. subdaviesi* **sp. n.** (p. 838) [a nom. nud. of Cizancourt 1938], *A. granulosa* **var. n.** *chumbiensis* (p. 839), Eocene, Pakistan, GILL J. Paleont. **27** (6) 1953 : 824–844 figs.

Astacolus hyalacrulus **sp. n.** (p. 52) Recent, Arctic, LOEBLICH & TAPPAN Smithson. misc. Coll. **121** (7) 1953 : 1–150 figs.

†*Astigerina pettersi* **sp. n.** (p. 727) Miocene, Colombia, REDMOND J. Paleont. **27** (5) 1953 : 708–733 figs.

Astrononion gallowayi **nom. n.** (p. 90) [for *Astrononion stellatum* Cushman & Edwards 1937 (*non Nonionina stellata* Terquem 1882)] Recent, Arctic, LOEBLICH & TAPPAN Smithson. misc. Coll. **121** (7) 1951 : 1–150 figs.

†*Bermudezina bramlettei* **sp. n.** (p. 19) Eocene, California, ISRAELSKY Prof. Paper U.S. Geol. Surv. **240-A** 1953 : 1–29 figs.

Bifarina decorata **sp. n.** (p. 12) Gulf of Mexico, PHLEGER Geol. Soc. Amer. Mem. **46** 1951 : 1–88 figs. ; †*B. thoënesi* **sp. n.** (p. 277) Neogene, Malay Archipelago, KEYZER Leid. geol. Meded. **17** 1953 : 259–292 figs.

Bigenerina irregularis **sp. n.** (p. 4) Gulf of Mexico, PHLEGER Geol. Soc. Amer. Mem. **46** 1951 : 1–88 figs. ; †*B. loeblichae* **sp. n.** (p. 31) Lower Cretaceous, Australia, CRESPIN Contr. Cushman Fdn. **4** (1) 1953 : 26–36 figs.

Bolivina advena **var. n.** *acutula* (p. 180) Californian coast, BANDY J. Paleont. **27** (2) 1953 : 161–182 figs. ; †*B. algeriana* **sp. n.** (p. 41) Miocene, Algeria, GLAÇON, MAGNE & MURAOUR C.R. Soc. géol. Fr. **3-4** 1952 : 41–43 fig. ; *B. barbata, fragilis, hastata, lowmani* **spp. n.** (p. 13), *B. minima, simplex* **spp. n.** (p. 14), *B. translucens* **sp. n.** (p. 15), Gulf of Mexico, PHLEGER Geol. Soc. Amer. Mem. **46** 1951 : 1–88 figs. ; †*B. fastigia* **var. n.** *miocenica* (p. 42) Tortonian, Italy, GIANOTTI Riv. ital. Paleont. **59** (1) 1953 : 37–46 figs. ; †*B. foxenensis* **sp. n.** (p. 58) Tertiary, California, BRAMLETTE Prof. Pap. U.S. Geol. Surv. **222** 1950 : 1–142 figs. ; †*B. himiensis* **sp. n.** (p. 519) Cainozoic, Japan, CHIJI & NAKASEKO J. geol. Soc. Japan **56** (663) 1950 : 519–522 figs. ; †*B. ornata* **sp. n.** (p. 161) Pliocene, Italy, CONATO Boll. Uff. geol. Italia **74** (1) 1953 : 155–168 figs. ; †*B. subaenariensis* **var. n.** *westermanni* (p. 132) Miocene, Aruba, DROOGER Contr. Cushman Fdn. **4** (4) 1953 : 116–147 figs. ; †*B. tortuosa* **var. n.** *lissa* (p. 721) Miocene, Colombia, REDMOND J. Paleont. **27** (5) 1953 : 708–733 figs.

†*Bolivinoides miocenicus* **sp. n.** (p. 38) Tortonian, Italy, GIANOTTI Riv. ital. Paleont. **59** (1) 1953 : 37–46 figs.

†*Bolivinopsis hiratai* **sp. n.** (p. 153) Pliocene, Japan, UCHIO Jap. J. Geol. Geogr. **23** 1953 : 151–162 fig.

Borovina **gen. n.** *zernovi* **sp. n.** (p. 871) Balpash-Sor Sea, Kazakhstan, Russia, SCHMALHAUSEN Akad. Nauk. S.S.S.R. Doklady **75** (6) 1950 : 869–872.

†*Bulbobaculites* Maync 1952 : status thereof, LOEBLICH & TAPPAN **800.**

†*Bulbophragmium* Maync 1952 ; status thereof, LOEBLICH & TAPPAN **800.**

†*Bulimina inflata* **var. n.** *renzi* (p. 129) Miocene, Aruba, DROOGER Contr. Cushman Fdn. **4** (4) 1953 : 116–147 figs. ; *B. spicata, tenuis* **spp. n.** (p. 16) Gulf of Mexico, PHLEGER Geol. Soc. Amer. Mem. **46** 1951 : 1–88 figs. ; †*B. truncata* **var. n.** *arcuta* (**nom. nud.**) Eocene, Russia, ZHUTEEV C.R. Acad. Sc. Moscow N.S. **90** (1) 1953 : 83–84 ; †*B. vermiformis* **sp. n.** (p. 3) Lower Tertiary, Aleutian Islands, Todd Contr. Cushman Fdn. **4** (1) 1953 : 1–7 figs.

†*Buliminella bullina* **sp. n.** (p. 34) Eocene, Paris Basin, LE CALVEZ Carté géol. dét. Fr. Mém. explic. 1950 : 1–64 ; †*B. gracilis* **sp. n.** (p. 102) Pleistocene, Victoria, COLLINS Mem. nat. Mus., Melb. **18** 1953 : 93–105 fig. ; †*B. sculpturata, septata* **spp. n.** (p. 276) Neogene, Malay Archipelago, KEYZER Leid. geol. Meded. **17** 1953 : 259–292 figs.

†*Cassidella* ; type thereof, HOFKER **622.**

†*Cassidella* Hofker ; status thereof, HOFKER **624.**

†*Cassidulina butonensis, multicamerata, perumbonata* **spp. n.** (p. 281) Neogene, Malay Archipelago, KEYZER Leid. geol. Meded. **17** 1953 : 259–292 figs. ; †*C. caribeana* **sp. n.** (p. 729), *C. vestae* **sp. n.** (p. 730) Miocene, Colombia, REDMOND J. Paleont. **27** (5) 1953 : 708–733 figs. ; *C. curvata* **sp. n.** (p. 26), *C. norcrossi* **subsp. n.** *australis* (p. 27) Gulf of Mexico, PHLEGER Geol. Soc. Amer. Mem. **46** 1951 : 1–88 figs. ; †*C. subglobosa* **var. n.** *subcalifornica* (p. 140) Miocene, Aruba, DROOGER Contr. Cushman Fdn. **4** (4) 1953 : 116–147 figs. ; †*C. woodsi* **sp. n.** (p. 64) Miocene, Louisiana, SMITH Geol. Bull. New Orleans **26** 1948 : 1–80 figs.

†*Cassidulinoides bifrons, marksi* **spp. n.** (p. 140) Miocene, Aruba, DROOGER Contr. Cushman Fdn. **4** (4) 1953 : 116–147 figs. ; †*C. californiensis* **sp. n.** (p. 61) Tertiary, California, BRAMLETTE Prof. Pap. U.S. Geol. Surv. **222** 1950 : 1–142 figs. ; *C. tenuis* **sp. n.** (p. 27) Gulf of Mexico, PHLEGER Geol. Soc. Amer. **46** 1951 : 1–88 figs.

†*Choffatella stenzeli* Stead 1951; status thereof, MAYNC **874.**

Cibicides deprimus **sp. n.** (p. 29), *C. mollis* **sp. n.** (p. 30), *C. robustus, rugosa, umbonatus* **spp. n.** (p. 31) Gulf of Mexico, PHLEGER Geol. Soc. Amer. Mem. **46** 1951: 1–88 figs.; †*C. pseudoungerianus* **var. n.** *antilleana* (p. 146); *C. mckannai* **var. n.** *westermanni* (p. 146); *C. mckannai* **var. n.** *arubana* (p. 146); *C. mckannai* **var. n.** *oranjestadensis* (p. 147), Miocene, Aruba, DROOGER Contr. Cushman Fdn. **4** (4) 1953: 116–147 figs.

Cibicidina basiloba **var. n.** *nitidula* (p. 178) Californian coast, BANDY J. Paleont. **27** (2) 1953: 161–182 figs.

†*Clavulinoides fijiensis* **sp. n.** (p. 271) Malay Archipelago, Neogene, KEYZER Leid. geol. Meded. **17** 1953: 259–292 figs.; †*C. inflatus* **sp. n.** (p. 20) Eocene, California, ISRAELSKY Prof. Paper U.S. Geol. Surv. **240-A** 1953: 1–29 figs.

†*Cribroelphidium imanishii* **sp. n.** p. 52) Miocene, Japan, ASANO Trans. paleont. Soc. Japan **10** 1953: 45–54 figs.

†*Cribrotextularia* Loeblich & Tappan 1952; junior synonym of *Olssonia* Bermudez 1949, LOEBLICH & TAPPAN **801.**

†*Cribroturretoides* **gen. n.** *miocenica* **sp. n.** (genotype) (p. 56) Miocene, Louisiana, SMITH Geol. Bull. New Orleans **26** 1948: 1–80 figs.

†*Crithionina moravica* **sp. n.** (p. 374) Eocene, Czechoslovakia, POKORNÝ Bull. int. Acad. Prague **52** (2) 1953: 371–405 figs.

†*Cyclammina*; systematics thereof, ASANO **70;** †*C. evolvinatus* **sp. n.** (p. 51), *C. hemiammonitiformis* **sp.n.** (p. 52), Miocene, Louisiana, SMITH Geol. Bull. New Orleans **26** 1948: 1–80 figs.

†*Dentalina* ? *amchitkaensis* **sp. n** (p. 3) Lower Tertiary, Aleutian Islands, TODD Contr. Cushman Fdn. **4** (1) 1953: 1–7 figs.; *D. frobisherensis* **sp. n.** (p. 55), *D. ittai* **sp. n.** (p. 56), *D. melvillensis* **sp. n.** (p. 57), Recent, Arctic, LOEBLICH & TAPPAN Smithson. misc. Coll. **121** (7) 1951: 1–150 figs.

†*Discorbis planulinaformis* **sp. n.** (p. 279) Neogene, Malay Archipelago, KEYZER Leid. geol. Meded. **17** 1953: 259–292 figs.; †*D. toulmini* **sp. n.** (p. 104) Paleocene, New Jersey, MCLEAN Contr. Cushman Fdn. **4** (3) 1953: 103–105 figs.

†*Dorothia excentrica* **sp. n.** (p. 22) *D. bulbosa, subretosa* **spp. n.** (p. 23), *D. altacamerata* **sp. n.** (p. 24) Eocene, California, ISRAELSKY Prof. Paper U.S. Geol. Surv. **240-A** 1953: 1–29 figs.; †*D. ovata* **sp. n.** (p. 190); *D. pupa* **var. n.** *depressa* (p. 191); *D. pupa* **var. n.** *tenuis* (p. 192); Cretaceous, England, BARNARD & BANNER Quart. J. geol. Soc. Lond. **109** (2) 1953: 173–216 figs.; †*D. robusta* **sp. n.** (p. 272) Neogene, Malay Archipelago, KEYZER Leid. geol. Meded. **17** 1953: 259–292 figs.

†*Eggerella karamatensis* **sp. n.** (p. 92); *E. forestensis* **sp. n.** (p. 95), Oligo-Miocene, Trinidad, BRONNIMANN Contr. Cushman Fdn. **4** (3) 1953: 87–100 figs.

†*Ehrenbergina dinapoli* **sp. n.** (p. 40) Tortonian, Italy, GIANOTTI Riv. ital. Paleont. **59** (1) 1953: 37–46 figs.; †*E. rugosa* **sp. n.** (p. 282) Neogene, Malay Archipelago, KEYZER Leid. geol. Meded. **17** 1953: 259–292 figs.

†*Ellipsoglandulina fragilis* **sp. n.** (p. 60) Tertiary, California, BRAMLETTE Prof. Paper U.S. Geol. Surv. **222** 1950: 1–142 figs.

†*Elphidium ancestrum* **nom. n.** (p. 4 [for *Polystomella costifera* (*pars*) Terquem 1882], *E. terquemianum* **nom. n.** (p. 56) [for *Polystomella laminata* Terquem 1882 (*non* Terquem 1878)] Eocene, Paris Basin, LE CALVEZ, Carte géol. dét. Fr. Mém. explic. 1950: 1–64; *E. frizzelli* **sp. n.** (p. 57) [for *Elphidium gunteri* var. *galvestonensis* Kornfeld (*pars*)] North Carolina coast, MILLER Contr. Cushman Fdn. (4) **2** 1953: 41–63 figs. †*E. granti* **var. n.** *tubaraense* (p. 718) Miocene, Colombia, REDMOND J. Paleont. **27** (5) 1953: 708–733 figs.; *E. omuraense* **sp. n.** (p. 137), Ômura Bay, Japan, SHUTO Jap. J. Geol. Geogr. **23** 1953: 127–138 figs.; †*E. tsudai* **sp. n.** (p. 521) Cainozoic, Japan, CHIJI & NAKASEKO J. geol. Soc. Japan **56** (663) 1950: 519–522 figs.

†*Enantiodentalina muraii* **sp. n.** (p. 152) Plio-Pleistocene, Japan, UCHIO Jap. J. Geol. Geogr. **23** 1953 : 151–162 fig.

†*Endothyra* ; status thereof, HENBEST **598.**

†*Entosolenia atlantica* **sp. n.** (p. 719) Miocene, Colombia, REDMOND J. Paleont. **27** (5) 1953 : 708–733 figs. ; †*E. boutoncapitata* **sp. n.** (p. 63) Miocene, Louisiana, SMITH Geol. Bull. New Orleans **26** 1948 : 1–80 figs.

†*Epistomaria* **subgen. n.** *Epistomariella* (p. 315) *miurensis* **sp. n.** (p. 315) ; *E.* (*E.*) *nakagatoensis* **sp. n.** (p. 316) Pliocene, Japan, KUWANO J. geol. Soc. Japan **56** (657) 1950 : 311–322 figs.

†*Epistomaroides* Uchio 1952 ; status thereof, HOFKER **620.**

†*Epistomina australiensis* **sp. n.** (p. 35) Lower Cretaceous, Australia, CRESPIN Contr. Cushman Fdn. **4** (1) 1953 : 26–36 figs.

†*Epistominella elegans* **sp. n.** (p. 5) Lower Tertiary, Aleutian Islands, TODD Contr. Cushman Fdn. **4** (1) 1953 : 1–7 figs.; *E. evax* **sp. n.** (p. 179) Californian coast, BANDY J. Paleont. **27** (2) 1953 : 161–182 figs.

†*Epistominidae* ; systematics thereof, HOFKER **620.**

†*Eponides beaberleae* **sp. n.** (p. 104) Eocene, New Jersey MCLEAN Contr. Cushman Fdn. **4** (3) 1953 : 103–105 figs. ; *E. hannai, polius, regularis* **spp. n.** (p. 21), *E. turgidus* **sp. n.** (p. 22) Gulf of Mexico, PHLEGER Geol. Soc. Amer. Mem. **46** 1951 : 1–88 figs. ; †*E. mammalonicus* **sp. n.** (p. 63) Miocene, Louisiana, SMITH Geol. Bull. New Orleans **26** 1948 : 1–80 figs.

Esosyrinx **gen. n.** (p. 85) (genotype *Pseudopolymorphina curta* Cushman & Ozawa 1930) Recent, Arctic, LOEBLICH & TAPPAN Smithson. misc. Coll. **121** (7) 1951 : 1–150 figs.

†*Euuvigerina* ; type thereof, HOFKER **622.**

†*Evlania* ? **sp. n.** (p. 233) (**nom. nud.**) Devonian, Russia, BISTELIUS etc., C.R. Acad. Sc. Moscow N.S. **90** (2) 1953 : 231–234.

†*Fabularia lata* **sp. n.** (p. 98) Pleistocene, Victoria, COLLINS Memnat. Mus., Melb. **18** 1953 : 93–105 fig.

Fissurina cucurbitasema **sp. n.** (p. 76) Recent, Arctic LOEBLICH & TAPPAN Smithson. misc. Coll. **121** (7) 1951 : 1–150 figs.

†*Frondicularia applanata, levis* **spp. n.** (p. 496) Tertiary, Germany, WICK Jahrb. preuss. geol. Ld. Anst. **59** 1939 : 476–512 figs.

†*Fusulinella jamesensis* **sp. n.** (p. 548) Pennsylvanian, British Columbia, THOMPSON, PITRAT & SANDERSON J. Paleont. **27** (4) 1953 : 545–552 figs. ; †*F. searighti* **sp. n.** (p. 323), *F. clarki* **sp. n.** (p. 325) Pennsylvanian, Missouri, THOMPSON J. Paleont. **27** (3) 1953 : 321–327 figs.

†*Gaudryina* (*Gaudryina*) *expansa, inflata* **spp. n.** (p. 16) Eocene, California, ISRAELSKY Prof. Paper U.S. Geol. Surv. **240-A** 1953 : 1–29 figs. ; †*G.* (*Pseudogaudryina*) *coalingensis* **var. n.** *alata* (p. 17), *G.* (*P.*) *phenocrysta* **sp. n.** (p. 18), *G.* (*P.*) *pyramidata* **var. n.** *tumeyensis* (p. 18), *G.* (*P.*) *corrugata* **sp. n.** (p. 18) Eocene, California, ISRAELSKY Prof. Paper U.S. Geol. Surv. **240-A** 1953 : 1–29 figs.

†*Gavelinopsis woodringi* **sp. n.** (p. 724) Miocene, Colombia, REDMOND J.: Paleont. **27** (5) 1953 : 708–733 figs.

†*Glabratella browningi* **sp. n.** (p. 725) Miocene, Colombia, REDMOND J. Paleont, **27** (5) 1953 : 708–733 figs

†*Gladiaria* **gen. n.** (p. 479) (genotype *Cristellaria herrmanni* Andreae 1898) Eocene-Miocene ; *G. multilimbosa* **sp. n.** (p. 488) Miocene, Germany, WICK Jahrb. preuss. geol. Ld. Anst. **59** 1939 : 476–512 figs.

†*Glandulina striata* **sp. n.** (p. 126) Miocene, Aruba, DROOGER Contr. Cushman Fdn. **4** (4) 1953 : 116–147 figs.

†*Globigerinoides nuttalli* **sp. n.** (p. 24) Eocene, Pacific, HAMILTON J. Paleont. **27** (2) 1953 : 204–237 figs.

†*Globotruncana* ; review of the systematics of, KLAUS **719.**

†*Gravellina* **gen. n.** *narivaensis* **sp. n.** (p. 87) (genotype) Oligo-Miocene, Trinidad, BRONNIMANN Contr. Cushman Fdn. **4** (3) 1953: 87–100 figs.

†*Gublerina hedbergi, glaessneri,* **spp. n.** (p. 155) Cretaceous, Cuba, BRÖNNIMANN & BROWN Contr. Cushman Fdn. **4** (4) 1953 : 150–156 figs.

†*Guttulina spicaeformis* **var. n.** *parisiensis* (p. 15) Eocene, Paris Basin LE CALVEZ Carte géol. dét. Fr. Mém. explic. 1950 : 1–64.

†*Gyroidina conica* **sp. n.** (p. 508) Tertiary, Germany, WICK Jahrb. preuss. geol. Ld. Anst. **59** 1939 : 476–512 figs. ; *G. gemma* **sp. n.** (p. 179) Californian coast, BANDY J. Paleont. **27** (2) 1953 : 161–182 figs. ; †*G. parva* **var. n.** *oranjestadensis* (p. 137) ; *G. venezuelana* **var. n.** *arubana* (p. 138) ; Miocene, Aruba, DROOGER Contr. Cushman Fdn. **4** (4) 1953 : 116–147 figs.

†*Haplophragmium* Reuss 1860 ; status thereof, LOEBLICH & TAPPAN **800.**

†*Haplophragmoides dickinsoni* **sp.n.** (p. 2 9) Lower Cretaceous, Australia, CRESPIN Contr. Cushman Fdn. **4** (1) 1953 : 26–36 figs. ; †*H. houghi* **sp. n.** (p. 47), *H. proboscidiformis, pseudolatidorsatum,* **spp. n.** (p. 48), *H. wilsoni* **sp. n.** (p. 49) Miocene, Louisiana, SMITH Geol. Bull. New Orleans **26** 1948 : 1–80 figs. ; †*H. narivaensis* **sp. n.** (p. 96) Oligo-Miocene, Trinidad, BRÖNNIMANN Contro Cushman Fdn. **4** (3) 1953 : 87–100 figs. ; †*H. protrullisatus, nonionelloides, robustus* **spp. n.** (p. 11), *H. longifissus* **sp. n.** (p. 12) Eocene, California, ISRAELSKY Prof. Pap. U.S. Geol. Surv. **240-A** 1953 : 1–29 figs. ; †*H. rotunda* **sp. n.** (p. 185), Jurassic, England, BARNARD Proc. Geol. Ass. Lond. **64** (3) 1953 : 183–197 figs. ; *H. wilberti* **sp. n.** (p. 21), *H. manilaensis* **sp. n.** (p. 22) brackish water, Louisiana coast, ANDERSEN Contr. Cushman Fdn. **4** (1) 1953 : 21–22 fig.

†*Hayasakaina* **gen. n.** (p. 207) *kotakiensis* **sp. n.** (p. 208) (genotype) Permian, Japan, FUJIMOTO & KAWADA Sci. Rep. Tokyo Bunrika Daig. **2C** (13–15)1 953 : 208–210 fig.

†*Hemicyclammina* **gen. n.** *sigali* **sp. n.** (p. 148) (genotype) Cretaceous, Algeria, MAYNC Contr. Cushman Fdn. **4** (4) 1953 : 148–150 figs.

Hopkinsina magnifica **sp. n.** (p. 59) Tertiary, California, BRAMLETTE Prof. Pap. U.S. Geol. Surv. **222** 1950 : 1–142 figs.

†*Jarvisella* **gen. n.** *karamatensis* **sp. n.** (p. 88) (genotype) Oligo-Miocene, Trinidad, BRONNIMANN Contr. Cushman Fdn. **4** (3) 1953 : 87–100 figs.

†*Karreiella inflata* **sp. n.** (p. 24), *K.* ? *lodoensis* **sp. n.** (p. 24) Eocene, California, ISRAELSKY Prof. Paper U.S. Geol. Surv. **240-A** 1953 : 1–29 figs.

†*Lagena abnormacostata* **sp. n.** (p. 61), *L. laevis* **var. n.** *circumaciculata* (p. 62) Miocene, Louisiana, SMITH Geol. Bull. New Orleans **26** 1948 : 1–80 figs. ; †. *L. apiculata* **var. n.** *phialaeformis* (p. 34) Lower Cretaceous, Australia, CRESPIN Contr. Cushman Fdn. **4** (1) 1953 : 26–36 figs. ; *L. apiopleura* **sp. n.** (p. 59), *L. flatulenta* **sp. n.** (p. 60), *L. parri* **sp. n.** (p. 64) Recent, Arctic, LOEBLICH & TAPPAN Smithson. misc. Coll. **121** (7) 1951 : 1–150 figs. ; †*L. colombiana* **sp. n.** (p. 717) Miocene, Colombia, REDMOND J. Paleont. **27** (5) 1953 : 708–733 fig. ; †*L. vitrea* **sp. n.** (p. 273) Neogene, Malay Archipelago, KEYZER, Leid. geol. Meded. **17** 1953 : 259–292 figs.

†*Lagenamminatortuotrigonalis* **sp.n.** (p. 41) Miocene, Louisiana, SMITH Geol. Bull. New Orleans **26** 1948 : 1–80 figs.

†Lagenidea ; taxonomy thereof, BROTZEN **185.**

Laryngosigma **gen. n.** *hyalascida* **sp. n.** (p. 83) Recent, Arctic, LOEBLICH & TAPPAN Smithson. misc. Coll. **121** (7) 1951 : 1–150 figs.

†*Lenticulina australiensis* **sp. n.** (p. 33) Lower Cretaceous, Australia, CRESPIN Contr. Cushm. Fdn. **4** (1) 1953 : 26–36 figs. ; †. *L.* (*Astacolus*) *homoradiata* **nom. n.** (p. 57) [for *Cristellaria* (*Astacolus*) *radiata* Ströbel 1943 (*non* Terquem)] Malm, Germany SIEBOLD & SIEBOLD Neues Jb. Geol. Paläont. **98** 1953 : 28–86 figs. ; †*L.* (*Planularia*) *polypora* **nom. n.**

(p. 53) [for *Cristellaria* (*Astacolus*) *prima* Ströbel 1943 (*non* d'Orbigny)] Malm, Germany, SIEBOLD & SIEBOLD Neues Jb. Geol. Paläont. **98** 1953 : 28–86 figs.

†*Lepidocyclina* ; comments thereon, COLE **260**; †*L.* (*Pliolepidina*) *gubernacula* **sp. n.** (p. 15) Eocene, Panama Canal Zone, COLE Prof. Pap. U.S. geol. Surv. **244** 1952 : 1–41 figs.

†*Lingulina evansi* **sp. n.** (p. 377) Jurassic, New Zealand, HORNIBROOK Trans. roy. Soc. N.Z. **81** (3) 1953 : 375–378 figs. ; †*L. seminuda* **var. n.** *denudata* (p. 61) Miocene, Louisiana, SMITH Geol. Bull. New Orleans **26** 1948 : 1–80 figs.

†*Lituola obscura* **sp. n.** (p. 181) Cretaceous, England, BARNARD & BANNER Quart. J. geol. Soc. Lond. **109** (2) 1953 : 173–126 figs.

Loxostomum truncatum **sp. n.** (p. 17) Gulf of Mexico, PHLEGER Geol. Soc. Amer. Mem. **46** 1951 : 1–88 figs.

†*Marginulina marreensis* **sp. n.** (p. 33) Lower Cretaceous, Australia, CRESPIN Contr. Cushman Fdn. **4** (1) 1953 : 26–36 figs. ; *M. planata* **sp. n.** (p. 9) Gulf of Mexico, PHLEGER Geol. Soc. Amer. Mem. **46** 1951 : 1–88 figs. ; †*M. conrathi* **sp. n.** (p. 103) Eocene, New Jersey, MCLEAN Contr. Cushman Fdn. **4** (3) 1953 : 103–105 figs.

†*Marginulinopsis australis* **sp. n.** (p. 33) Lower Cretaceous, Australia, CRESPIN Contr. Cushman Fdn. **4** (1) 1953 : 26–36 figs.

†*Marssonella lodoensis, angulata, impendens* **spp. n.** (p. 21) Eocene, California, ISRAELSKY Prof. Paper U.S. Geol. Surv. **240-A** 1953 : 1–29 figs.

†*Meandropsina anahensis* **sp. n.** (p. 47) Oligocene ; *M. iranica* **sp. n.** (p. 148) Miocene ; Iraq, HENSON ["Special Publication"] 1950.

Miliolinella chukchiensis **sp. n.** (p. 47) Recent, Arctic, LOEBLICH & TAPPAN Smithson. misc. Coll. **121** (7) 1953 : 1–150 figs.

†*Millerella tortula* **sp. n.** (p. 192), *M. designata, cooperi* **spp. n.** (194) Carboniferous, United States, ZELLER J. Paleont. 27 (2) 1953 : 183–199, figs.; †*Mirella* sp. ; described but unnamed, MINATO **899.**

†*Minojapanella* **gen. n.** *elongata* **sp. n.** (p. 150) Permian, Japan, FUJIMOTO & KANUMA J. Paleont. **27** (1) 1953 : 150–152 figs.

†Miogypsinae ; classification thereof, DROOGER **361.**

Mississippina omuraensis **sp. n.** (p. 137) Ômura Bay, Japan, SHUTO Jap. J. Geol. Geogr. **23** 1953 : 127–138 figs.

†*Multiseptida* **sp. n.** (?) (p. 233) (**nom. nud.**) Devonian, Russia, BISTELIUS etc. C.R. Acad. Sci. Moscow N.S. **90** (2) 1953 : 231–234.

Nemogullmia **gen. n.** *longevariabilis* **sp. n.** (p. 105) (genotype) Gullmar Fjord, Sweden, NYHOLM Contr. Cushman Fdn. **4** (3) 1953 : 105–106 figs.

†*Neouvigerina* : type thereof, HOFKER **622.**

Nodosaria emphysaocyta **sp. n.** (p. 58) Recent, Arctic, LOEBLICH & TAPPAN Smithson. misc. Coll.. **121** (7) 1951 : 1–150 figs. ; †*N. simplex* **var. n.** *gracibasica* (p. 60) Miocene, Louisiana, SMITH Geol. Bull. New Orleans **26** 1948 : 1–70 figs.

†*Nonion triangulare* **sp. n.** (p. 127 Miocene, Aruba, DROOGER Contr. Cushman Fdn. **4** (4) 1953 : 116–147 figs.

†*Nonionella hanzawai* **sp. n.** (p. 52) Middle Miocene, Japan, ASANO Trans. paleont. Soc. Japan **10** 1953 : 45–54 figs.

†*Nummulites abrardi* **sp. n.** (p.236) ; *N. pamiri* **sp. n.** (p.2 49) ; *N. subpamiri* **sp. n.** (p. 250) ; *N. irregularis* **var. tendant** *distans* **sp. n.** (p. 231) ; *M. subirregularis* **var. tendant** *tchihatcheffi* **sp. n.** (p. 232) ; *N. spirectypa* **var. sp. n.** (p. 233), *N.* **sp. n.** (p. 236) [Confused taxonomy in this work.] Eocene, Turkey, DACI-DIZER Rev. Fac. Sci. Univ. Istanbul. **18B** (3–4) 1953 : 207–300 figs. ; †*N. gizehensis* **var. n.** *armeniensis* (p. 83) ; *N. distans* **var. n.** (p. 83) ; (*nomina nuda*) Eocene, Russia, ZHUTEEV C.R. Acad. Sc. Moscow N.S. **90** (1) 1953 : 83–84.

†*Olssonia* Bermudez 1949 ; status thereof, LOEBLICH & TAPPAN **801.**

†*Operculina canalifera* **var. sp. n.** (p. 270); *O. deperiti* **var,** *kastamonica* **sp. n.** (p. 276); Eocene, Turkey [Confused taxonomy in this work], DACI-DIZER Rev. Fac. Sci. Univ. Istanbul **18-B** (3–4) 1953 : 207–300 figs.

†*Orbignyna sherlocki* **sp. n.** (p. 201), Cretaceous, England, BARNARD & BANNER Quart. J. geol. Soc. Lond. **109** (2) 1953 : 173–216 figs.

†*Orbitolites complanatus* **var. n.** *minima* (p. 58) Eocene, Iraq, HENSON [" Special Publication "] 1950.

Parafissurina follicula, fusuliformis **spp. n.** (p. 79); *P. himatiostoma* **sp. n.** (p. 80); *P. tectulostoma* **sp. n.** (p. 81); Recent, Arctic, LOEBLICH & TAPPAN Smithson. misc. Coll. **121** (7) 1951 : 1–150 figs.

†*Parafusulina japonica*; status thereof, KAWADA & MORIKAWA **701.**

†*Parathurammina minuta* **sp. n.** (p. 233) **(nom. nud.)** Devonian, Russia, BISTELIUS C.R. Acad. Sci. Moscow N.S. **90** (2) 1953, 231–234.

†*Parfia* **gen. et sp. n.** (p. 233) **(nom. nud.)** Devonian, Russia, BISTELIUS etc., C.R. Acad. Sci. Moscow N.S. **90** (2) 1953 : 231–234.

Pateoris **gen. n.** (p. 42) *hauerinoides* (Rhumbler) (genotype) [on *Quinqueloculina subrotunda* (Montagu) forma *hauerinoides* Rhumbler] Recent, Arctic, LOEBLICH & TAPPAN Smithson misc. Coll. **121** (7) 1953 : 1–150 figs.

†*Pelosina lagenoides* **sp. n.** (p. 28) Lower Cretaceous, Australia, CRESPIN Contr. Cushman Fdn. **4** (1) 1953 : 26–36 figs.

Pelosinella didera **sp. n.** (p. 16) Recent, Arctic, LOEBLICH & TAPPAN Smithson. misc. Coll. **121** (7) 1953 : 1–150 figs.

†*Peneroplidae*; systematics thereof, HENSON **603, 621.**

†*Peneroplis dusenburyi* **sp. n.** (p. 32) Upper Eocene; *P. farsensis* **sp. n.** (p. 33) Miocene; *P. damesini* **sp. n.** (p. 34) Upper Eocene; *P. glynnjonesi* **sp. n.** (p. 35) Oligocene; *P. thomasi* **sp. n.** (p. 36) Oligocene; *P. evolutus* **sp. n.** (p. 37) Miocene; all Iraq, HENSON [" Special Publication "] 1950.

†*Perisphinctina* (*Cristellaria*) *articulata* **var. n.** *costata* (p. 487) Miocene, Germany, WICK Jahrb. preuss. geol. Ld. Anst. **59** 1939 : 476–512 figs.

†*Placentammina* Majzon 1943; status thereof, POKORNY **1010.**

†*Planispirinella tenuis* **sp. n.** (p. 99) Pleistocene, Victoria, COLLINS Mem. nat. Mus., Melb. **18** 1953 : 93–105 fig.

†*Planulina antillea* **sp. n.** (p. 143) Miocene, Aruba, DROOGER Contr. Cushman Fdn. **4** (4) 1953 : 116–147 figs.; *P. exorna* **sp. n.** (p. 32) Gulf of Mexico, PHLEGER Geol. Soc. Amer. Mem. **46** 1951 : 1–88 figs.; †*P. italica* **sp. n.** (p. 216) Tertiary, Italy, GIANNINI Mem. Soc. tosc. Sci. nat. **55-A** 1948 : 180–227 figs.

†*Plectofrondicularia beetsi, grandis* **spp. n.** (p. 274) Neogene, Malay Archipelago, KEYZER Leid. geol. Meded. **17** 1953 : 259–292 figs.; †*P. goharai* **sp. n.** (p. 312) Pliocene, Japan, KUWANO J. Geol. Soc. Japan **56** (657) 1950 : 311–322 figs.

†*Plectogyra*; status thereof, HENBEST **598;** †*P. tantala* **sp. n.** (p. 195), *P. kentuckyensis, pandorae,* **spp. n.** (p. 196), *P. maxima, excellens, phrissa* **spp. n.** (p. 198) Carboniferous, United States, ZELLER J. Paleont. **27** (2) 1953 : 183–199 figs.

†*Pleurostomella bolivinoides* **var. n.** *lata* (p. 279) Neogene, Malay Archipelago, KEYZER Leid. geol. Meded. **17** 1953 : 259–292 figs.

†*Praebulimina*; type thereof, HOFKER **622.**

†*Praerhaphydionina delicata* **sp. n.** (p. 52) Oligocene; *P. huberi* **sp. n.** (p. 53) Upper Eocene; Iraq, HENSON [" Special Publication "] 1950.

Proteonina comprima **sp. n.** (p. 2) Gulf of Mexico, PHLEGER Geol. Soc. Amer. Mem. **46** 1951 : 1–88 figs.; †*P. harrangensis* **sp. n.** (p. 40) Miocene, Louisiana, SMITH Geol. Bull. New Orleans **26** 1948 : 1–80 figs.

†*Pseudoclavulina variata, emaciata prismatica* **spp. n.** (p. 19), *P. copiosa* **sp. n.** (p. 20) Eocene, California, ISRAELSKY Prof. Paper U.S. Geol. Surv. **240-A** 1953 : 1–29 figs.

†*Pseudocyclammina hedbergi* **sp. n.** (p. 101) Cretaceous, Venezuela,

MAYNC Contr. Cushman Fdn. **4** (3) 1953 : 101–103 figs.

†*Pseudoglandulina regularis* **sp. n.** (p. 34) Lower Cretaceous, Australia, CRESPIN Contr. Cushman Fdn. **4** (1) 1953 : 26–36 figs. ; †*P. oveyi* **sp. n.** (p. 189) Jurassic, England, BARNARD Proc. Geol. Assoc. Lond. **64** (3) 1953 : 183–197 figs.

†*Pseudogumbelina* **gen. n.** (p. 150) (genotype *Gumbelina excolata* Cushman 1926) ; *P. palpebra* **sp. n.** (p. 155) Cretaceous, Cuba, BRÖNNIMANN & BROWN Contr. Cushman Fen. **4** (4) 1953, 150–156 figs.

†*Pseudonubeculina jurassica* **sp. n.** (p. 44) Malm, Germany, SIEBOLD & SEIBOLD Neues Jb. Geol. Paläont. **98** 1953 : 28–86 figs.

Pseudoparrella (?) *decorata, rugosa* **spp. n.** (p. 28) Gulf of Mexico, PHLEGER Geol. Soc. Amer. Mem. **46** **1951** : 1–88 figs. ; †*P. pustulosa* **sp. n.** (p. 281) Neogene, Malay Archipelago, KEYZER Leid. geol. Meded. **17** 1953 : 259–292 figs. ; †*P. tamana, naraensis* **spp. n.** (p. 317) Pliocene, Japan, KUWANO J. geol. Soc. Japan **56** (657) 1950 : 311–322 figs.

†*Pseudoschwagerina* (*Zellia*) *heritschi* **subsp. n.** *hsui* (p. 108) ; *P.* (Z.) *h.* **subsp. n.** *chengkungensis* (p. 109) Permian, China, SHENG Bull. geol. Soc. China **29** (1–4) 1950 : 105–109 figs. ; †*P. stanislavi* **sp. n.** (p. 881) Permian, Texas, DUNBAR Amer. J. Sci. **251** (11) 1953 : 798–813 figs.

†*Pulvinulinella purisima* **sp. n.** (p. 60) Tertiary, California, BRAMLETTE Prof. Pap. U.S. Geol. Surv. **222** 1950 : 1–142 figs.

†*Pyrgo magnacaudata* **sp. n.** (p. 58) Miocene, Louisiana, SMITH Geol. Bull. New Orleans **26** 1948 : 1–80 figs. ; *P. rotalaria* **sp. n.** (p. 47) Recent, Arctic, LOEBLICH & TAPPAN Smithson. misc. Coll. **121** (7) 1953 : 1–150 figs.

†*Quinqueloculina moynensis* **sp. n.** (p. 98) Pleistocene, Victoria, COLLINS Mem. nat. Mus., Melb. **18** 1953 : 93–105 fig. ; †*Q. sigmoilinoides* **sp. n.** (p. 43) Tortonian, Italy, GIANOTTI Riv. ital. Paleont. **59** (1) 1953 : 37–46 figs. ; *Q. stalkeri* **sp. n.** (p. 40) Recent, Alaska, LOEBLICH & TAPPAN Smithson. misc. Coll. **121** (7) 1953 : 1–150 figs.

†*Recurvoides gillieparkeri* **sp. n.** (p. 46) Miocene, Louisiana, SMITH Geol. Bull. New Orleans **26** 1948 : 1–80 figs. ; †*R. higginsi* **sp. n.** (p. 98) Oligo-Miocene, Trinidad, BRÖNNIMANN Contr. Cushman Fdn. **4** (3) 1953 : 87–100 figs.

†*Reophax beaurecarsoni, davepopei* **spp. n.** (p. 42) Miocene, Louisiana, SMITH Geol. Bull. New Orleans **26** 1948 : 1–80 figs.

†*Reussella bordata* **sp. n.** (p. 722) Miocene, Colombia, REDMOND J. Paleont. **27** (5) 1953 : 708–733 figs. ; †*R. parallela* **sp. n.** (p. 42) Tortonian, Italy, GIANOTTI Riv. ital. Paleont. **59** (1) 1953 : 37–46 figs. ; †*R. secans* **sp. n.** (p. 48) Eocene, Paris Basin, LE CALVEZ Carteé géol. dét. Fr. Mém. explic. 1950 : 1–64 ; †*R. etrusca* **sp. n.** (p. 201) Tertiary, Italy, GIANNINI Mem. Soc. tosc. Sci. nat. **55-A** 1948 : 180–227 figs.

Rhabdammina ; new forms thereof, SHTCHEDRINA **1187, 1188;** *R. abyssorum* **subspp. n.** *artica, pacifica* (p. 21) Arctic seas, SHTCHEDRINA Trav. Inst. Zool. Acad. Sci. U.S.S.R. **12** 1952 : 7–24, figs. [in Russian] ; *R. pulverulenta* **sp. n.** (p. 30) [to include *R. discreta* Hoglund 1947 (*non* Brady)], *R. heteractina* **sp. n.** (p. 32) [includes *R. linearis* Hoglund 1947 (*non* Brady)], *R. abyssorum* **sp. n.** (p. 25), Arctic, SHTCHEDRINA Trav. Inst. Zool. Acad. Sci. U.S.S.R. **12** 1952 : 25–33 figs.

†*Robulina angulata* **var. n.** *costata* (p. 478) Oligocene, *R. callocostata* **sp. n.** (p. 487) Miocene, *R. magna* **sp. n.** (p. 490) Miocene, Germany, WICK Jahrb. preuss. geol. Ld. Anst. **59** 1939 : 476–512 figs.

†*Robulus bertraneui* **sp. n.** (p. 134) Mio-Pliocene, Algeria, GLACON & MAGNÉ Bull. Soc. Hist. nat. Afr. N. **44** (3–4) 1953 : 134–7 fig. ; †*R. pseudo-costatus* (Plummer) Cushman var. *comis* Cushman **nom. var.** [for *Robulus pseudo-costatus* (Plummer) Cushman var. *inornatus* Kline 1943 (*non* d'Orbigny)] Paleocene, Gulf Coast, CUSHMAN Prof. Pap. U.S. Geol. Surv. **232** 1951 : 1–75 figs. ; †*R. yoshitakiensis, himiensis,* **spp. n.** (p. 521) Cainozoic, Japan, CHIJI &

NAKASEKO J. geol. Soc. Japan **56** (663) 1950 : 519–522 figs.

†*Rotalia andersoni, sarmientoi* **spp. n.** (p. 726) Miocene, Colombia, REDMOND J. Paleont. **27** (5) 1953 : 708–733 figs. ; †*R. beccarii* **subsp. n.** *honyaensis* (p. 57) Miocene, Japan, ASANO Trans. paleont. Soc. Japan **11** 1953 : 55–59 figs. ; †*R. ketienziensis* **subsp. n.** *angulata* (p. 312), *R. maruhasii* **sp. n.** (p. 314) Pliocene, Japan, KUWANO J. geol. Soc. Japan **56** (657) 1950 : 311–322 figs. ; *R. lomaensis, versiformis* **spp. n.** (p. 179) Californian coast, BANDY J. Paleont. **27** (2) 1953 : 161–182 figs. ; †*R. polygyrata* **sp. n.** (p. 280) Neogene, Malay Archipelago, KEYZER Leid. geol. Meded. **17** 1953 : 259–292 figs. ; "*R.*" *paucilocula*ta **sp. n.** (p. 23), "*R.*" *translucens* **sp. n.** (p. 24) Gulf of Mexico, PHLEGER Geol. Soc. Amer. Mem. **46** 1951 : 1–88 figs.

†*Ruttenella* **gen. n.** (p. 279) *butonensis* **sp. n.** (p. 280) (genotype) Neogene, Malay Archipelago, KEYZER Leid. geol. Meded. **17** 1953 : 259–292 figs.

†*Sakesaria cylindrica* **sp. n.** (p. 96), *S. c.* **var. n.** *costulata* (p. 96). *S. somalica* **sp. n.** (p. 97), *S. pyrum* **sp. n.** (p. 98) Palaeocene, Migiurtina, RUGGIERI G. geol. (2) **21** 1950 : 94–98 figs.

†*Schenckiella rugosa* **sp. n.** (p. 25) Eocene, California, ISRAELSKY Prof. Paper U.S. Geol. Surv. **240-A** 1953 : 1–29 figs.

Scutuloris **gen. n.** *tegminis* **sp. n.** (p. 41) (genotype) Recent, Alaska, LOEBLICH & TAPPAN Smithson. misc. Coll. **121** (7) 1953 : 1–150 figs.

†*Sigmoilina colomi* **sp. n.** (p. 56) Miocene, Algeria, C.R. Soc. géol. Fr. **4** 1953 : 56–58 figs. ; *S. distorta* **sp. n.** (p. 8) Gulf of Mexico, PHLEGER Geol. Soc. Amer. Mem. **46** 1951 : 1–88 figs.

†*Sigmomorphina apiculata* **sp. n.** (p. 24) Eocene, Paris Basin, LE CALVEZ Carte géol. dét. Fr. Mém. explic. 1950 : 1–64.

†*Silicosigmoilina* **subgen. n.** *Bramletteia* (p. 10) *perplexa* **sp. n.** (p. 11) (subgenotype) Eocene, California, ISRAELSKY Prof. Pap. U.S. Geol. Surv. **240-A** 1953 : 1–29 figs.

†*Siphogenerina appenninica* **sp. n.** (p. 202) Tertiary, Italy, GIANNINI Mem. Soc. tosc. Sci. nat. **55-A** 1948 : 180–227 figs.

†*Siphonodosaria fijiensis* **var. n.** *butonensis* (p. 278) ; *S. simplex* **sp. n.** (p. 278) ; *S. umbgrovei* **sp. n.** (p. 279), Neogene, Malay Archipelago, KEYZER Leid. geol. Meded. **17** 1953 : 259–292 figs. ; †*S. fragilis* **sp. n.** (p. 4) Lower Tertiary, Aleutian Islands, TODD Contr. Cushman Fdn. **4** (1) 1953 : 1–7 figs.

Siphotextularia rolshauseni **sp. n.** (p. 4) Gulf of Mexico, PHLEGER Geol. Soc. Amer. Mem. **46** 1951 : 1–88 figs.

†*Spirillina infima* (Strickland)—lectotype and new diagnosis thereof, BARNARD **95.**

†*Spiroloculina ocularis* **sp. n.** (p. 57) Miocene, Louisiana, SMITH Geol. Bull. New Orleans **26** 1948 : 1–80 figs.

†*Spiroplectammina edgelli* **sp. n.** (p. 30) Lower Cretaceous, Australia, CRESPIN Contr. Cushman Fdn. **4** (1) 1953 : 26–36 figs. ; †*S. elongata* **sp. n.** (p. 182) Cretaceous, England, BARNARD & BANNER Quart. J. geol. Soc. Lond. **109** (2) 1953 : 173–216 figs. ; †*S. grossefinale, waughi* **spp.n.** (p. 53), Miocene, Louisiana, SMITH Geol. Bull. New Orleans **26** 1948 : 1–80 figs. ; †*S. perplexa* **sp. n.** (p. 12), *S. bolivinoides* **sp. n.** (p. 13), *S, praelaevis, densa* **spp. n.** (p. 14) Eocene, California, ISRAELSKY Prof. Paper U.S. Geol. Surv. **240-A** 1953 : 1–29 figs.

Spiroplectella gracillima **sp. n.** (p. 271) Neogene, Malay Archipelago, KEYZER Leid. geol. Meded. **17** 1953 : 259–292 figs.

†*Somalina danieli* **sp. n.** (p. 60) Eocene, Iraq, HENSON ["Special Publication"] 1950.

†*Sorites grecoensis* **sp. n.** (p. 56) Miocene, Cyprus, HENSON ["Special Publication"] 1950.

†*Suggrunda kleinpelli* **sp. n.** (p. 59) Tertiary, California, BRAMLETTE Prof. Pap. U.S. Geol. Surv. **222** 1950 : 1–142 figs.

†*Taberina daviesi* **sp. n.** (p. 51) Palaeocene, Iraq, HENSON ["Special Publication "] 1950.

†*Textularia alazanensis* **var. n.** *arubana* (p. 119) Miocene, Aruba, DROOGER Contr. Cushman Fdn. **4** (4) 1953 : 116–147 figs. ; †*T. anacooraensis* **sp. n.** (p. 31) Lower Cretaceous, Australia, CRESPIN Contr. Cushman Fdn. **4** (1) 1953 : 26–36 figs. ; †*T. philippinensis* **sp. n.** (p. 271) Neogene, Malay Archipelago, KEYZER Leid. geol. Meded. **17** 1953 : 259–292 figs.

†*Tribrachia* ; status thereof, HAGN **563.**

Trichohyalus **gen. n.** (p. 116) (genotype *Discorbis bartletti* Cushman 1933) ; *T. pustulata* **sp. n.** (p. 118) Recent, Arctic, LOEBLICH & TAPPAN Smithson. misc. Coll. **121** (7) 1951 : 1–150 figs.

Triloculina trihedra **sp. n.** (p. 45) Recent, Arctic, LOEBLICH & TAPPAN Smithson, misc. Coll. **121** (7) 1953 : 1–150 figs. ; *T. inornata* **var. n.** *longidentata* (p. 178) Californian coast, BANDY J. Paleont. **27** (2) 1953 : 161–182 figs.

†*Trimosina otukai* **sp. n.** (p. 155) Pleistocene, Japan, UCHIO Jap. J. Geol. Geogr. **23** 1953 : 151–162 fig.

†*Triplasia* ; status thereof, HAGN **563;** †*T. loeblichi* **sp. n.** (p. 212) Eocene, Switzerland, HAGN Paläont. Z. **27** (3–4) 1953 : 212–219 fig.

†*Tristix triangularis* **sp. n.** (p. 190) Jurassic, England, BARNARD Proc. Geol. Ass. Lond. **64** (3) 1953 : 183–197 figs.

†*Tritaxia mitrata* **sp. n.** (p. 16) Eocene, California, ISRAELSKY Prof. Paper U.S. Geol. Surv. **240-A** 1953 : 1–29 figs.

†*Triticites nakatsugawensis* **sp. n.** (p. 117) ; *T. n.* **var. n.** *hemmii* (p. 117) ; *T. uemurai* **sp. n.** (p. 120) Carboniferous, Japan, MORIKAWA Sci. Rep. Saitama Univ. **1B** (2) 1953 : 115–122 fig.

†*Trochammina lafourchensis* **sp. n.** (p. 59) Miocene, Louisiana, SMITH Geol. Bull. New Orleans **26** 1948 : 1–80 figs. ; †*T. minuta* **sp. n.** (p. 32) Lower Cretaceous, Australia, CRESPIN Contr. Cushman Fdn. **4** (1) 1953 : 26–36 figs. ; †*T. nipponica* **sp. n.** (p. 54) Middle Miocene, Japan, ASANO Trans. paleont. Soc. Japan **10** 1953 : 45–54 figs.

†*Trochamminoides discotrochus* **sp. n.** (p. 43), *T. novalateralis* **sp. n.** (p. 44), *T. thompsoni* **sp. n.** (p. 45), Miocene, Louisiana, SMITH Geol. Bull. New Orleans **26** 1948 1–80 figs.

†*Truncorotaloides* **gen. n.** (p. 817), *rohri* **sp. n.** (p. 818) (genotype), T. *r.* **var. n.** *guaracaraensis* (p. 819), *T. r.* **var. n.** *piparoensis* (p. 819), *T. r.* **var. n.** *mayoensis* (p. 820) Eocene, Trinidad, BRONNIMANN & BERMUDEZ J. Paleont. **27** (6) 1953 : 817–820 figs.

†*Tubulogenerina butonensis* **sp. n.** (p. 277) Neogene, Malay Archipelago, KEYZER Leid. geol. Meded. **17** 1953 : 259–292 figs.

†*Uvigerina bononiensis, primiformis,* **spp. n.** (p. 121), *U. parkeri, breviformis,* **spp. n.** (p. 122), *U. graciliformis* **sp. n.** (p. 122), *U. macrocarinata* **sp. n.** (p. 123), *U. semiornata, karreri,* **spp. n.** (p. 130), *U. pygamoides* **sp. n.** (p. 131), Miocene, Vienna Basin, PAPP & TURNOVSKY Jb. geol. Bundesanst. **96** (1) 1953 : 117–142 fig. ; †*U. echinata, ochotica* **spp. n.** (p. 145) Quaternary, Okhotsk Sea, SAIDOVA C.R. Acad. Sc. Moscow N.S. **93** (1) 1953 : 143–146 figs. ; *U. finisterrensis* **sp. n.** (p. 27) Galician coast, COLOM Biol. Inst. esp. Oceanogr. **51** 1952 : 1–59 figs. ; †*U. foxenensis* **sp. n.** (p. 59) Tertiary, California, BRAMLETTE Prof, Pap. U.S. Geol. Surv. **222** 1950 : 1–142 figs. ; †*U. hispido-costata* **var. n.** *pseudobradyana* (p. 133) Miocene, Aruba, DROOGER Contr. Cushman Fdn. **4** (4) 1953 : 116–147 figs.

†*Vaginulina brevis* **sp. n.** (p. 185) Tertiary, Italy, GIANNINI Mem. Soc. tosc. Sci. nat. **55-A** 1948 : 180–227 figs. ; †*V. pseudosenticosa* **sp. n.** (p. 59) Miocene, Louisiana, SMITH Geol. Bull. New Orleans **26** 1948 : 1–80figs.

†*Valvulineria butonensis* **sp. n** (p. 280) Neogene, Malay Archipelago KEYZER Leid. geol. Meded. **17** 1953 : 259–292 figs. ; †*V. infracretacea* **nom. n.** (p. 34) [for *Planulina cretacea* Crespin 1944 and *Trochammina*

parvula Crespin 1944] Lower Cretaceous, Australia, CRESPIN Contr. Cushman Fdn. **4** (1) 1953 : 26–36 figs. ; *V. laevigata* **sp. n.** (p. 25) Gulf of Mexico, PHLEGER Geol. Soc. Amer. Mem. **46** 1951 : 1–88 figs. ; †*V. olssoni* **sp. n.** (p. 725) Miocene, Colombia, REDMOND J. Paleont. **27** (5) 1953 : 708–733 figs.

†*Verneuilina frustrata* **sp. n.** (p. 15) Eocene, California, ISRAELSKY Prof. Paper U.S. Geol. Surv. **240-A** 1953 : 1–29 figs. ; †*V. hannai* **sp. n.** (p. 55) Miocene, Louisiana, SMITH Geol. Bull. New Orleans **26** 1948 : 1–80 figs. ; †*V. howchini* **sp. n.** (p. 31) Lower Cretaceous, Australia, CRESPIN Contr. Cushman Fdn. **4** (1) 1953 : 26–36 figs.

†*Vertebralina colombiana* **sp. n.** (p. 716) Miocene, Colombia, REDMOND J. Paleont. **27** (5) 1953 : 708–733 fig.

†*Virgulina* d'Orbigny ; status thereof, HOFKER **624**; †*V. honyaensis* **sp. n.** (p. 57) Miocene, Japan, ASANO Trans. palaeont. Soc. Japan **11** 1953 : 55–59 figs. ; *V. spinicostata, tessellata* **spp. n.** (p. 19) Gulf of Mexico, PHLEGER Geol. Soc. Amer. Mem. **46** 1951 : 1–88 figs. ; †*V. californensis* **var. n.** *purisima* **sp. n.** (p. 58), BRAMLETTE Prof. Pap. U.S. Geol. Surv. **222** 1950 : 1–142 figs.

†*Vulvulina pennatula* **var. n.** *cuneata* (p. 54) Miocene, Louisiana, SMITH Geol. Bull. New Orleans **26** 1948 : 1–80 figs.

†*Zellia* ; as a subgenus of *Pseudoschwagerina*, SHENG **1178.**

(d) Heliozoa.

[No record].

(e) Radiolaria.

Cinclopyramis gigantea alata **subsp. n.** (p. 43) from Russian seas, DOGIEL & REŠETNJAK Zool. Zh., Moscow **32** 1953 : 43–48 figs.

Streptodelus **gen. n.** (p. 296) [genotype *Dictyocephalus amphora* Haeckel 1887—the first form listed as such in this work] Recent, CAMPBELL J. Paleont. **27** (2) 1953 : 296.

Rhizopoda Incertae Sedis.

Megamoebomyxa **gen. n.** (p. 95) *argillobia* **sp. n.** (p. 96) Gullmar Fjord, Scandinavia, NYHOLM Zool. Bidr. Uppsala **29** 1952 : 93–102 figs. ; *M.* ; systematic position thereof, NYHOLM **949.**

2.—MASTIGOPHORA

A. PHYTOMASTIGINA

(a) Chrysomonadida.

Calyptrospaera papillifera **sp. n.** (p. 48) Norwegian Sea, HALLDAL Hvalråd Skr. **38** 1953 : 1–91 figs.

Discoaster planctonicus **sp. n.** (p. 52) salt water, off Toulon, SECAL Arch. Zool. exp. gén. Notes et Rev. **89** 1952 : 51–55 figs.

(b) Cryptomonadida.

[No record]

(c) Dinoflagellata.

Dinoflagellata ; taxonomy thereof, BRAARUD **158.**

Peridiniiniae ; systematics thereof, PAVILLARD **979.**

Amphidinium massarti, subsalum **spp. n.** (p. 24) brackish water, France, BIECHELER Bull. biol. Suppl. **36** 1952: 1–149 figs.

Amphidoma caudata **sp. n.** (p. 51) Norwegian Sea, HALLDAL, Hvalråd. Skr. **38** 1953 : 1–91 figs.

Crypthecodinidae **fam. n.** (p. 81) ; *Crypthecodinium* **gen. n.** (p. 81) *setense* **sp. n.** (p. 81) brackish water, France, BIECHELER Bull. biol. Suppl. **36** 1952 : 1–149 figs.

Glenodinium bacilliferum **sp. n.** (p. 44) brackish water, France, BIECHELER Bull. biol. Suppl. **36** 1952 : 1–149 figs.

Goniaulax dimorpha **sp. n.** (p. 50) brackish water, France, BIECHELER Bull. biol. Suppl. **36** 1952 : 1–149 figs.

Goniodoma pseudogoniaulax **sp. n.** (p. 55) brackish water, France, BIECHELER Bull. biol. Suppl. **36** 1952 : 1–149 figs.

Gymnodinium halophilum **sp. n.** (p. 33) brackish water, France,

BIECHELER Bull. biol. Suppl. **36** 1952 : 1–149 figs.

Gyrodinium vorax **sp. n.** (38) brackish water France, BIECHELER biol. Suppl. **36** 1953 : 1–149 figs.

Ichthyodinium **gen. n.** (p. 976) *chabelardi* **sp. n.** parasitic on eggs of sardines, HOLLANDE & CACHON C.R. Acad. Sci., France **235** 1952 : 976–977.

Oxyrrhis marina ; systematic position thereof, DRAGESCO **352.**

Oxytomum nanum **sp. n.** (p. 56) Norwegian Sea, HALLDAL, Hvalråd Skr. **38** 1953 : 1–91 figs.

Peridinium chattoni **sp. n.** (p. 69) brackish water, France, BIECHELER Bull. biol. Suppl. **36** 1952 : 1–149 figs.

Syndinium borgerti **sp. n.** (p. 1607) parasitic in Radiolaria, France, HOLLANDE, ENJUMET & MANCIET C.R. Acad. Sci., Paris **236** 1953 : 1607–1609 figs.

(d) Euglenoidida.

New and rare Euglenids from Morocco, BOURRELLY & GAYRAL **153.**

Strombomonas subcurvata **var. n.** *africana* p. 24) Schoul plateau, Morocco, BOURRELLY & GAYRAL Bull. Soc. Sci. nat. Maroc. **31** 1952 : 23–25 figs.

Trachelomonas werneri **sp. n.** (p. 23) Schoul plateau, Morocco, BOURRELLY & GAYRAL Bull. Soc. Sci. nat. Maroc. **31** 1952 : 23–25 figs.

(e) Phytomonadida.

[No record]

B. ZOOMASTIGINA

(f) Protomonadida.

Biflagella **gen. n.** (p. 105) *texoma* **sp. n.** from gut of N. American lizards, ZIMMERMAN & BROWN Proc. Okla. Acad. Sci. **33** 1952 : 103–111 figs.

Leishmania tropica **subsp. n.** *mexicana* for parasite causing Mexican cutaneous leishmaniasis, BIAGI Medicina, Mexico **33** 1953 : 401–406.

Trypanosoma legeri in Costa Rican sloth, *Bradypus griseus*, TREJOS & MONTERO-GEI **1324**; *T. rangeli*, characteristics and affinities, HOARE **617.**

(g) Trichomonadida.

Tritrichomonas batrachorum (Perty): structure taxonomic status, nomenclature, list of hosts, HONIGBERG **631.**

(h) Hypermastigida.

[No record].

(i) Diplomonadida.

[No record]

(j) Polymonadida.

Foaina fontesi, *F. calmoni* **spp. n.** (p. 68) from termites, *Cryptotermes havilandi*, Brazil, MELLO Arch. Protistenk. **99** 1953 : 55–69 figs.

3.—SPOROZOA

A. COCCIDIOMORPHA

(a) Gregarinida.

Didymophyes fimetarii (p. 473), *D. caudata* (p. 474), *D. ovalocystis* (p. 474), *D. longa* (p. 477), *D. ovati* (p. 478), *D. ovalocephala* (p. 479), *D. lata* (p. 481), *D. guttiformis* (p. 483), *D. gracilis* (p. 483), *D. crassa* (p. 483), *D. parva* (p. 484), *D. sphaeridii* (p. 485), *D. sphaerocephala* (p. 485), *D. microcephala* (p. 486), *D. macrocystis* (p. 487), *D. cercyonis* (p. 487), *D. lanceolata* (p. 488) **spp. n.**, from dung beetles, Germany, CORDUA Arch. Protistenk. **98** 1953 : 469–506.

Farinocystis **gen. n.** (p. 204) *tribolii* **sp. n.** in *Tribolium* spp., Czechoslovakia, WEISER Acta Soc. zool. Bohemoslov. **17** 1953 : 199–211 figs.

Gamocystis fimetarii (p. 489), *G. obliterati* (p. 489) **spp. n.** from dung beetles, Germany, CORDUA Arch. Protistenk. **98** 1953 : 469–506.

Gigaductidae **fam. n.** (p. 82) for *Gigaductus* spp., with revision of these gregarines, FILIPPONI Riv. Parassit. **14** 1953 : 69–84 figs.

Hoplorhynchus ozakii **sp. n.** (p. 357) from Japanese Myriapod, *Otocryptops*, and comparative morphology of other species, HUKUI Annot. zool. jap. **25** 1952 : 352–358 figs.

Lankesteria referred to fam. Diplocystidae, KRAMAŘ **730.**

Lecudina franciana **sp. n.** (p. 7) from worm *Phascolion strombi*, France, ARVY Bull. Lab. marit. Dinard No. **36** 1952 : 7–13 figs.

Lepismatophila parva **sp. n.** (p. 89) *L. campodeae* **sp. n.** (p. 92) from insects, France, TUZET, MANIER & ORMIÈRES Ann. Sci. nat. (zool.), Sér. 11, **14** 1953 : 87–93 figs.

Protomagalhaensia marrottai Filipponi, 1952, identical with and synonym of *Gregarina cavalierina* Blanchard, 1905, THÉODORIDÈS **1285.**

Pyxinia crystalligera, taxonomic status and morphology, KOZLOFF **729.**

Stenophora triangula **sp. n.** (0. 148) from Japanese Myriapod, *Nedyopus patrioticus*, HUKUI Zool. Mag., Tokyo, **60** 1951 : 146–148 figs.

Stylocephalus opatroides **sp. n.** (p. 188) from gut of Indian beetle, *Opatroides* sp., DANDEKAR & TEMBE Proc. Ind. Sci. Congr. **40** 1953 : 188 ; *Stylocephalus* spp. from *Blaps* : description and methods for studying, FILIPPONI **433.**

(b) Coccidiida.

Coccidia, subdivision into 2 groups: Eucoccidia (extracellular) and Schizococcidia (intracellular), GRELL **549.**

Eimeria hermani **sp. n.** (p. 336), *E. striata* **sp. n.** (p. 336), *E. fulva* **sp. n.** (p. 339) from Canada Goose, U.S.A., with differential diagnosis of other spp. from ducks and geese, FARR J. Wash. Acad. Sci. **43** 1953 : 336–340 figs. ; *Eimeria* : oocyst measurements of spp. in New Zealand and European rabbits, BULL **201.**

Eucoccidium dinophili : structure and life-cycle, GRELL **549.**

Haemogregarina fitzsimonsi **sp. n.** (p. 62), *H. parvula* **sp. n.** (p. 6) from tortoise, Mozambique, SANTOS DIAS Bol. Soc. Estud. Moçambique **23** (82) 1953 : 41–73 figs.; *H.* (= ? *Hepatozoon*) *acanthoclini* **sp. n.** (p. 96) from New Zealand coastal fishes, LAIRD Trans. Roy. soc. N.Z. **81** 1953 : 79–143 figs. ; *Haemogregarina* : list of spp. described from pythons with distribution, SANTOS DIAS **1120.**

Isospora natalensis **sp. n.** (p. 150) from man, Natal, ELSDON-DEW J. trop. Med. Hyg. **56** 1953 : 149–150 figs. ; *Isospora* : comparative characters of spp. from Amphibia Salientia, CHAKRAVARTY & KAR **225**

(c) Haemosporidia.

Babesiella berbera Sergent *et al.* 1924, regarded as identical with and therefore a synonym of *B. bovis* (Starcovici, 1893), but latter sp. in W. Europe is a synonym of *B. divergens* (M'Fadyean & Stockman 1911), SIMITCH & NEVENITCH **1204.**

Haemoproteus balazuci **sp. n.** (p. 56) from tortoise, Moçambique, SANTOS DIAS Bol. Soc. Estud. Moçambique **23** (82) 1953 : 41–73 figs. ; *H. figueiredoi* **sp. n.** (p. 69), *H. montezi* **sp. n.** (p. 77), *H. morneti orientalis* **subsp. n.** (p. 84), *H. tendeiroi* **sp. n.** (p. 86), *H. vilhenai* **sp. n.** (p. 88) from birds, Portuguese East Africa, SANTOS DIAS Moçambique No. **73** 1953 : 61–99 figs. ; *H. danilewskii* **var. n.** (p. 221) *urbanensis* from sparrow, U.S.A., SACHS Trans. Amer. micr. Soc. **72** 1953 : 216–227 figs.

Leucocytozoon in Swedish Tetraonid game birds : life-cycle, incidence of infection, disease, BORG **147.**

Nycteria **gen. n.** *medusiformis* **sp. n.** (p. 362) from blood of African bat, *Nycteris capensis*, GARNHAM & HEISCH Trans. R. Soc. trop. Med. Hyg. **47** 1953 : 357–363 figs.

Plasmodium **sp. n.** (?) (p. 512) from lizard *Anolis frenatus*, Panama, HUFF & MARCHBANK Res. Rept. Nav. Med. Res. Inst., Bethesda **11** 1953 : 509–516 figs.

B. CNIDOSPORIDIA

(d) Myxosporidia.

Ceratomyxa orientalis **nom. n.** (p. 384) for *C. truncata orientalis* Dogiel, 1948, ŠULMAN Zool. Zh., Moscow **32** 1953 : 384–393 figs.

Chloromyxum mrigalae **sp. n.** (p. 64) from Indian fishes, *Cirrhina* spp., TRIPATHI Rec. Indian Mus. **50** 1953 : 63–88 figs. ; *Chloromyxum* : spp. grouped according to shell-valve characters, TRIPATHI **1325.**

Davisia **gen. n.** (p. 100) [with type *D.* (=*Ceratomyxa*) *spinosa* (Davis, 1917)], *D. diplocrepis* **sp. n.** (p. 101) from New Zealand coastal fishes, LAIRD Trans. Roy. Soc. N.Z. **81** 1953 : 79–143 figs.

Henneguya latesi **sp. n.** (p. 72) from Indian fishes, *Lates*, TRIPATHI Rec. Indian Mus. **50** 1953 : 63–88 figs. ; *H. miyazakii* **sp. n.** (p. 81) from Japanese fish. *Chaenogobius*, HOSHINA J. Tokyo Univ. Fish. **39** 1952 : 69–90 figs.

Hexacapsula **gen. n.** (p. 294) *neothunni* **sp. n.** (p. 297) pathogenic to tunny-fish in Japanese seas, ARAI & MATSUMOTO Bull. Jap. Soc. sci. Fish. **18** 1953 : 293–298 figs.

Kudoa chilkaensis **sp. n.** (p. 67) from Indian fishes, *Strongylura*, TRIPATHI Rec. Indian Mus. **50** 1953 : 63–88 figs.

Leptotheca subelegans **sp. n.** (p. 105) from New Zealand coastal fishes, LAIRD Trans. Roy. Soc. N.Z. **81** 1953 : 79–143 figs.

Myxidium echelypterygii **sp. n.** (p. 69) from eel, Japan, HOSHINA J. Tokyo Univ. Fish. **39** 1952 : 69–90 figs.

Myxobolus dermatobius **sp. n.** (p. 209) from carp, Japan, HOSHINA J. Tokyo Univ. Fish. **39** 1953 : 209–214 figs. ; *M. branchialis* **sp. n.** (p. 67), *M. indicum* **sp. n.** (p. 68), *M. sphericum* **sp. n.** (p. 69), *M. barbi* **sp. n.** (p. 70) from Indian fishes, TRIPATHI Rec. Indian Mus. **50** 1953 : 63–88 figs. ; *M. acanthogobii* **sp. n.** (p. 75) from Japanese fish, *Acanthogobius*, HOSHINA J. Tokyo Univ. Fish. **39** 1952 : 69–90 figs. ; *M. ochridensis* **sp. n.** (p. 77), *M. turbinoidus* **sp. n.** (p. 83) from fish, Lake Ochrida, Yugoslavia, GEORGEVITCH Glasn. Acad. Serbe Sci., Cl. Sci. math. nat., N.S. **192** (1) 1949 : 73–86 figs. ; *Myxobolus* : spp. grouped according to spore characters, TRIPATHI **1325.**

Myxobylatidae **fam. n.** (p. 388) for gen. *Myxobilatus*, ŠULMAN Zool. Zh., Moscow **32** 1953 : 384–393 figs.

Myxoproteus caudatus **sp. n.** (p. 385), *M. elongatus* **sp. n.** (p. 387) from fishes, White Sea, ŠULMAN Zool. Zh., Moscow **32** 1953 : 384–393 figs.

Myxosoma pseudorasborae **sp. n.** (p. 74) from Japanese fish, *Pseudorasbora parva*, HOSHINA J. Tokyo Univ. Fish. **39** 1952 : 69–90 figs. ; *M. tripterygii* **sp. n.** (p. 113) from New Zealand coastal fishes, LAIRD Trans. Roy. Soc. N.Z. **81** 1953 : 79–143 figs.

Neohenneguya **gen. n.** (p. 75) *tetraradiata* **sp. n.** from Indian fishes, *Odontamblyopus*, TRIPATHI Rec. Indian Mus. **50** 1953 : 63–88 figs.

Parvicapsula **gen. n.** *asymmetrica* **sp. n.** (p. 391) from fish, White Sea, ŠULMAN Zool. Zh., Moscow **32** 1953 : 384–393 figs.

Parvicapsulidae **fam. n.** (p. 391) for *Parvicapsula* **gen. n.** (*q. v.*), ŠULMAN Zool. Zh., Moscow **32** 1953 : 384–393 figs.

Sinuolinea sinuosa **sp. n.** (p. 391) from fish, White Sea, ŠULMAN Zool. Zh., Moscow **32** 1953 : 384–393 figs.

Sphaeromyxa pultai **sp. n.** (p. 78), *S. theraponi* **sp. n.** (p. 79) from Indian fishes, TRIPATHI Rec. Indian Mus. **50** 1953 : 63–88 figs. ; *S. tripterygii* **sp. n.** (p. 109) from New Zealand coastal fishes, with differential characters of other spp., LAIRD Trans. Roy. Soc. N.Z. **81** 1953 : 79–143 figs. ; *Sphaeromyxa* : spp. grouped according to spore characters, TRIPATHI **1325.**

Thelohanellus mrigalae **sp. n.** (p. 76), *T. calbausi* **sp. n.** (p. 76), *T. gangeticus* **sp. n.** (p. 77) from Indian fishes, TRIPATHI Rec. Indian Mus. **50** 1953 : 63–88 figs.

Trigonosporus **gen. n.** *acanthogobii* **sp. n.** (p. 85) from Japanese fish, *Acanthogobius flavimanus*, HOSHINA J. Tokyo Univ. Fish. **39** 1952 : 69–90 figs.

Unicauda ophicephali **sp. n.** (p. 73) from Indian fishes, *Ophicephalus*, TRIPATHI Rec. Indian Mus. **50** 1953 : 63–88 figs. ; *Unicauda* : spp. grouped according to spore characters, TRIPATHI **1325.**

(e) Microsporidia.

Gurleya sp. (? n.) from Lepidoptera, S. Africa : morphology, life-cycle, GIBBS **505.**

Nosema whitei **sp. n.** (p. 205) from beetle *Tribolium castaneum*, Czechoslovakia, WEISER Acta Soc. zool. Bohemoslov. **17** 1953 : 199–211 figs.; *N. locustae* **sp. n.** (p. 290) pathogenic to its host, *Locusta migratoria*, CANNING Parasitology **43** 1953 : 287–290 figs.

Thelohania hyphantriae **sp. n.** (p. 228) from Lepidopteran *Hyphantria cunea*, Czechoslovakia, WEISER Acta Soc. zool. Bohemoslov. **17** 1953 : 228.

(f) Actinomyxidia.

[No record].

(g) Sarcosporidia.

[No record].

(h) Haplosporidia.

Dermocystidium koi **sp. n.** (p. 825) parasitic in carp, *Cyprinus carpio*, Japan, HOSHINA & SAHARA Bull. Jap. Soc. sci. Fish. **15** 1950 : 825–829 figs. ; *D. percae* **sp. n.** (p. 193) from fins of perch, Poland, SCHEER Zool. Anz. **149** 1952 : 192–193 figs.

Haplosporidium periplanetae **sp. n.** (p. 179) from cockroach, Yugoslavia, GEORGEVITCH Glas Acad. Serbe Sci., Cl. Sci. math. biol., N.S. **210** (7) 1953 : 179–198 figs.

Metchnikovella berliozi **sp. n.** (p. 9) hyperparasitic in gregarine *Lecudina franciana* **sp. n.** (*q. v.*), ARVY Bull. Lab. marit. Dinard No. **36** 1952 : 7–13 figs.

Sporozoa incertae sedis

Sporozoon (related to *Karyolysus*?): life-history in *Phascolosoma*, affinities, ETHERINGTON **398.**

Carpanoplasma **gen. n.** *desousai* **sp. n.** (p. 89) from bird, *Pyrrhula europaea*, Portuguese East Africa, SANTOS DIAS Moçambique no. **73** 1953 : 61–99 figs.

Toxoplasma : relationship to Sarcosporidia, and systematic position, MANWELL & DROBECK **861.**

4.—CILIOPHORA

A. OPALINATA

Cepedea : key to spp. and subspp., UTTANGI **1342;** *Cepedea philauti* **sp. n.** (p. 147), *C. dimidiata naglavensis* **subsp. n.** (p. 148) from Indian Anura, UTTANGI Rec. Ind. Mus. **49** 1951 : 139–156 figs.

Opalina japonica **subsp. n.** *dharwarensis* (p. 181), in rectum of *Rana limnocharis*, UTTANGI Curr. Sci. **22** (6) 1953 : 181–182 figs.

Protoopalina : key to spp., UTTANGI **1342;** *Protoopalina indica* **sp. n.** (p. 148), *P. karnatakensis* **sp. n.** (p. 151), *P. dharwarensis* **sp. n.** (p. 152) from Indian amphibian, *Microhyla ornata*, UTTANGI Rec. Ind. Mus. **49** 1951 : 139–156 figs. ; *P. rhopaloides* **sp. n.** (p. 264) from frog *Pelobates fuscus*, Poland, WACH Acta Parasit. polon. **1** 1953 : 259–290 figs.

Zelleriella : key to spp., UTTANGI **1342;** *Zelleriella microhylae* **sp. n.** (p. 152), *Z. froilanoi* **sp. n.** (p. 154) from Indian Anura, UTTANGI Rec. Ind. Mus. **49** 1951 : 139–156 figs.

B. CILIATA

Ciliata ; systematics thereof, BOCK **137.**

(a) Holotrichida.

New but undescribed ciliates from the Pyrenean coast, DRAGESCO **354.**

Anoplophyra asymetrica **nom. prov.** (p. 50) in gut of *Lumbricus*, PUYTORAC Arch. zool. exp. gen. Notes et Rev. **88** 1951 : 49–58 figs. ; *A. brachioni* **sp. n.** (p. 81) from Crustacean *Brachionus urceolaris*, Spain, SELGA Publ. Inst. Biol. apl., Barcelona **13** 1953 : 79–82 figs.

Banyulsella **gen. n.** *viridis* **sp. n.** (p. 637) beach sands, Pyrenean coast, DRAGESCO Vie et -Milieu **4** (4) 1953 : 633–637 figs.

Bryophrya **gen. n.** (p. 89) (genotype *P. bavariensis* (Kahl 1941)), WENGEL Arch. Protistenk. **99** (3) 1953 : 70–141 figs.

Centrophorella faurei **nom. nud.** (p. 629) salt water, Pyrenean coast, DRAGESCO Vie et Milieu **4** (4) 1953 :

627–632 ; *C. longissima* **sp. n.** (p. 636) beach sands, Pyrenean coast, DRAGESCO Vie et Milieu **4** (4) 1953 : 633–637 figs.

Chilodonella hyalina **sp. n.** (p. 237) moss, Czechoslovakia, SRÁMEK-HUŠEK Csl. Biol. **1** (2) 1952 : 236–240 figs.

Chlamydodon ; systematics thereof, KANEDA **692**; *Chlamydodon pedarius* **sp. n.** (p. 51) brackish water, Japan, KANEDA J. Sci. Hiroshima Univ. (Zool.) **14** 1953 : 51–55 fig.

Colpidium - Galucoma - Leucophrys-Tetrahymena group : systematic status of strains, CORLISS **273**; nomenclature of congeneric forms, CORLISS **271**.

Colpoda eurystoma **sp. n.** (p. 313) from humus, Hungary, GELLÉRT Ann. Biol. Univ. Czeged **1** 1950 : 313–319 figs.

Faurea **gen. n.** *arenicola* **sp. n.** (p. 636) beach sands, Pyrenean coast, DRAGESCO Vie et Milieu **4** (4) 1953 : 633–637 figs. ; *F. mirabilis* **nom. nud.** (p. 629) salt water, Pyrennean coast, DRAGESCO Vie et Milieu **4** (4) 1953 : 627–632.

Frontonia parameciiformis **sp. n.** (p. 97) dry moss, Germany, WENGEL Arch. Protistenk. **99** (3) 1953 : 70–141 figs.

Geleia gigas **nom. nud.** (p. 629) salt water, Pyrenean coast, DRAGESCO Vie et Milieu **4** (4) 1953 : 627–632.

Helicoprorodon barbatus **nom. nud.** (p. 628) salt water, Pyrenean coast, DRAGESCO Vie et Milieu **4** (4) 1953 : 627–632 ; *H. minutus* **sp. n.** (p. 109) sands, Kieler Bay, BOCK Zool. Anz. **149** 1952 : 107–115 figs.

Ichthyopthirius multifiliis : ecology and biology, ŠČUPAKOV **1143**.

Lacrymaria affinis **sp. n.** (p. 108) sands, Kieler Bay. BOCK Zool. Anz. **149** 1952 : 107–115 figs. ; *L. delamarei, trichocystus* **spp. n.** (p. 634) beach sands, Pyrenean coast, DRAGESCO Vie et Milieu **4** 4 1953 : 633–637 fig. ; *L. pulchra* **sp. n.** (p. 77) dry moss, Germany, WENGEL Arch. Protistenk. **99** (3) 1953 : 70–141 figs.

Loxophyllum ozakii **sp. n.** (p. 47) brackish water, Japan, SHIGEMATSU J. Sci. Hiroshima Univ. (Zool.) **14** 1953 : 47–50 figs.

Metaradiophyra hovassi **sp. n.** (p. 50) in digestive tubes of Oligochaetes, PUYTORAC Arch. zool. exp. gen. Notes et Rev. **88** 1951 : 49–58 figs.

Nathella **gen. n.** (p. 129) *rayii* **sp. n.** (p. 129), *kumarii* **sp. n.** (p. 130) from Indian fish *Mystus cavasius*, SINGH Res. Bull. E. Panjab Univ. No. **35** 1953 : 117–134 figs.

Nathellidae **fam. n.** (p. 129) for for *Nathella* spp. (*q. v.*), Hymenostomata, SINGH Res. Bull. E. Panjab Univ. No. **35** 1953 : 117–134 figs.

Ophryoglena monopthalma **sp. n.** (p. 237) free, GELEI Ann. Biol. Univ. szeded. **1** 1950 : 237–242 fig.

Prorodon arenarius, trichocystus **spp. n.** (p. 633) beach sands, Pyrenean coast, DRAGESCO Vie et Milieu **4** 4 1953 : 633–637 fig.

Pseudoglaucoma **gen. n.** (p. 99) (genotype *P. labiata* (Kahl)) dry moss, Germany, WENGEL Arch. Protistenk. **99** 1953 : 70–131 figs.

Pseudoplatynematum **gen. n.** *loricatum* **sp. n.** (p. 112) ; *P. parvum* **sp. n.** (p. 110) sands, Kieler Bay, BOCK Zool. Anz. **149** 1952 : 107–115 figs.

Pseudoprorodon mononucleatus, incisus **spp. n.** (p. 108) sands, Kieler Bay, BOCK Zool. Anz. **149** 1952 : 107–115 figs.

Remanella faurei **nom. nud.** (p. 628) salt water, Pyrenean coast, DRAGESCO Vie et Mileu **4** (4) 1953 : 627–632.

Remanella microstoma, caudata **spp. n.** (p. 636) beach sands, Pyrenean coast, DRAGESCO Vie et Milieu **4** (4) 1953 : 633–637 figs.

Spathidium atypicum **sp. n.** (p. 81) dry moss, Germany, WENGEL Arch. Protistenk. **99** (3) 1953 : 70–141 figs.

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Urotricha ; systematics thereof, KHAJURAI **710**; *Urotricha bhatiai* **sp. n.** (p. 54) pond water, Varuna River, United Provinces, KHAJURAI Rec. Indian. Mus. **48** (2) 1951 : 53–59 fig.

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Stylicauda **gen. n.** (p. 299) (genotype *Tintinnopsis platensis* Cunha y Fonseca 1917) Argentine coast, BALECH Physis **20** (58) 1951 : 291–302 figs.

Tintinnopsis amphistoma **sp. n.** (p. 292) Argentine coast, BALECH Physis **20** (58) 1951 : 291–302 figs. ; *T. extumescens*, *apertula* **spp. n.** (p. 59) North Pacific, STRELKOV Trav. Inst. Zool. Acad. Sci. U.R.S.S. **13** 1953 : 57–69 figs.

(d) Entodiniomorpha.

[No record].

(e) Hypotrichida.

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(f) Peritrichida.

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Epistylis gammari **forma n.** *rotunda* (p. 51) on *Gammarus fossarum* ; *E. g.* **forma n.** *nodosa* (p. 52) on *Gammarus fossarum* ; *E. rhyacophilae* **sp. n.** (p. 52) on larva of *Rhyacophila evoluta* ; *E. amphora* **sp. n.** (p. 53) on *Carinogammarus triacanthus* ; Hungary, STILLER Ann. hist. nat. Mus. hung. N.S. **4** 1953 : 47–70 figs.

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C. SUCTORIA

[No record].

PROTISTA INCERTAE SEDIS

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Histocystidium **gen. n.** (p. 396) *ranae* **sp. n.**, parasitic in skin of frogs, *Rana catesbiana*, U.S.A., GOODCHILD J. Parasit. **39** (4. Sect. 1) 1953 : 395–405 figs.

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